

Maine Life Care	
Retirement Community Inc.)
Cumberland County)
Scarborough, Maine)
A-738-71-D-M/R	
	DEPARTMENTAL
	FINDINGS OF FACT AND ORDER
	AIR EMISSION LICENSE

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Maine Life Care Retirement Community, Inc. (MLCRC) of Portland, Maine has applied to renew their Air Emission License (A-738-71-A-N), permitting the operation of emission sources associated with their Piper Shores Life Care Community located in Scarborough, Maine.

As the construction of the facility progressed, it was determined to install equipment that was different than the proposed equipment appearing on the original license. The equipment that was installed appears below. No increase in licensed emissions will result in the modification of licensed equipment.

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B. Emission Equipment

MLCRC is authorized to operate the following air emission units:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Fuel Type</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Post Combustion Ctrl Eqpmnt</u>	<u>Stack #</u>
Boiler 1	2.86	propane	30.43	none	1
Boiler 2	2.86	propane	30.43	none	1
Boiler 3	2.86	propane	30.43	none	1
Boiler 4	2.86	propane	30.43	none	1
Emergency Generator 1	6.83	diesel, 0.05% sulfur	49.85	none	n/a
Emergency Generator 2*	0.46	diesel, 0.05% sulfur	3.34	none	n/a
Package Boiler	1.44	propane	15.32	none	1

* Emergency Generator 2 is considered an insignificant activity pursuant to MEDEP Chapter 115.

C. Application Classification

The changes made to this renewal do not increase the exsisting licensed emissions. Therefore the change made to the licensed equipment are considered to be a minor revision. This source has been determined to be a minor source and this license renewal has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. Descriptions of the applicable requirements are provided below under the appropriate headings.

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B. New Emission Units

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT) as defined in Chapter 100 of the Air Regulations. BACT is a top down approach to selecting air emission controls considering economic, environmental and energy impacts.

1. Boilers 1, 2, 3, 4 and the Package Boiler

MLCRC operates Boilers 1 - 4 primarily for facility heating needs. The Package Boiler provides domestic hot water. Boilers 1 - 4 have maximum design heat input capacities of 2.86 MMBtu/hr, each, firing propane fuel. The Package Boiler has a maximum heat input capacity of 1.44 MMBtu/hr, also firing propane fuel. Boilers 1 - 4 and the Package Boiler are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

Based on the relatively small size of the Boilers, and the quantity of pollutants that could potentially be emitted, it is determined by the Bureau of Air Quality that any add on pollution control device would be economically unjustified. Therefore, BACT for Boilers 1, 2, 3, 4, and the Package Boiler shall be the firing of propane as fuel.

Visible emissions from Boilers 1 - 4 and the Package Boiler shall not exceed 10% opacity on a six minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

4. Emergency Generator 1

MLCRC operates Generator 1 primarily for emergency power generation. Based on the relatively small size of Generator 1 and the quantity of pollutants that could potentially be emitted, it is determined by the Bureau of Air Quality that any add on pollution control device would be economically unjustified. Therefore, BACT for Generator 1 shall be an operational limit of 500 hours per year, 12 month rolling total, and the firing of diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight.

Visible emissions from Generator 1 shall not exceed 20% opacity on a six minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

C. Facility Emissions and Fuel Use Caps

MLCRC shall not exceed the use of 2,000,000 gallons per year of propane or natural gas fuel to be fired in Boilers 1, 2, 3, and 4 and the Package Boiler on a 12 month rolling total basis.

Generator 1 shall not exceed an operational limit of 500 hours per year (12 month rolling total) firing diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight. MLCRC shall maintain records to document compliance with these limits.

Total Allowable Annual Emissions for the Facility
(used to calculate the annual license fee)

Pollutant	Tons/year
PM	4.9
PM ₁₀	4.9
SO ₂	0.2
NO _x	21.5
CO	3.5
VOC	1.1

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a minor new source shall be determined on a case-by-case basis.

Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

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The Department hereby grants Air Emission License A-738-71-D-M/R, subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.

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- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

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- (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

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- (16) Emissions from each boiler (1,2,3, and 4) shall not exceed the following:

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.14
PM ₁₀	0.14
SO ₂	0.01
NO _x	0.43
CO	0.06
VOC	0.02

Visible emissions from boilers 1, 2, 3, and 4 shall not exceed 10% opacity on a six minute block average basis, except for no more than two (2), six (6) minute block averages in a three hour period.

- (17) Emissions from the Package Boiler shall not exceed the following:

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.07
PM ₁₀	0.07
SO ₂	0.01
NO _x	0.21
CO	0.03
VOC	0.01

Visible emissions from the package boiler shall not exceed 10% opacity on a six minute block average basis, except for no more than two (2), six (6) minute block averages in a three hour period.

- (18) Emissions from Generator 1 shall not exceed the following:

<u>Pollutant</u>	<u>Lb/MMBtu</u>	<u>lb/hr</u>
PM	0.12	0.82
PM ₁₀	-	0.82
SO ₂	-	0.35
NO _x	-	30.12
CO	-	6.49
VOC	-	2.39

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Visible emissions from Generator 1 shall not exceed 20% opacity on a six minute block average basis, except for no more than two (2), six (6) minute block averages in a three hour period.

Generator 1 shall not exceed an operational limit of 500 hours per year (12 month rolling total) firing diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight.

MLCRC shall maintain fuel purchase records as well as an operational log or hour meter to document compliance with these limits.

- (19) MLCRC shall not exceed the use of 2,000,000 gallons per year of propane fuel or natural gas in Boilers 1, 2, 3, and 4, and the Package Boiler on a 12 month rolling total basis.

MLCRC shall maintain fuel purchase records to demonstrate compliance with this limit.

- (20) MLCRC shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

- (21) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 2, 2003

Date of application acceptance: June 23, 2003

Date filed with Board of Environmental Protection: _____

This order prepared by Jonathan Voisine, Bureau of Air Quality